IF YOU TEACH – YOU TEACH READING

Vicky G. Spencer
&
Cynthia Garcia-Simpson
Sam Houston State University
Bonnie B. Carter
George Mason University
and
Richard T. Boon
University of Georgia

Currently, schools are under pressure to reform their curriculum and instructional practices so that all students can perform successfully on high-stakes test. One essential requisite skill for success on all of these assessments is reading. Because the classroom is typically made up of students who exhibit a broad range of performance levels, it can be quite challenging for even the most experienced classroom teacher to successfully teach the content to all students. Research has revealed that when explicit, teacher-directed strategy instruction is used students make significant gains in their reading skills. This paper examines the challenges that content area teachers face in addressing the academic needs of all learners and provides some specific strategies that have been proven effective in the inclusive classroom.

Much of what teachers do in their classrooms is directly related to the data provided by the results of statewide assessments. Currently, schools are under pressure to reform their curriculum and instructional practices in order to become high performing schools on these high-stakes tests (Alfassi, 1997). One essential requisite skill for success on all of these assessments is reading. Therefore, a reading imperative is created.

One commonly held view is that in the primary years, students are *learning to read*, but as they progress through school, the focus becomes more on *reading to learn* (Carnine, Silbert, Kame'enui, & Tarver, 2004; Chall, 1995; Jetton & Alexander, 2004). According to Alexander (2000), this dichotomy does not represent the reality of reading development. The process of learning to read, which involves decoding and discovering the meanings within oral and written language, and reading to learn, which involves using reading abilities to seek knowledge, are inextricably tied together.

In 2005, the National Assessment of Educational Progress (NAEP) found that only 29% of eighth grade boys and 34% of eighth grade girls read at or above the proficient level. (Perie, Grigg, & Donahue, 2005) At this level, students have the grade-appropriate ability to deal analytically with challenging subject matter while applying it to real-world situations (Langer, 2001; Perie et al.), which is reading to learn. Unfortunately, the prognosis for success in the classroom is not very promising for a majority of students, especially students with disabilities. Therefore, it is crucial that teachers make a paradigm shift in their way of thinking about reading instruction.

Clearly, it is a misconception to think that reading can only be addressed in a language arts, English, or reading class. In a review of the literature, Lester (2000), found that secondary teachers perceive literacy to be a relatively low priority and/or the responsibility of English teachers. Some teachers immediately think of a skill-and-drill program, while others have expressed that they are uncomfortable planning instruction to foster reading development (Zipperer, Worley, Sisson, & Said, 2002). The problem may lie within the limitations of teachers' understanding about teaching reading. Hall (2005)

suggests that researchers and educators may not be helping content area teachers to understand their role as teachers of reading. Certainly, the standardized reading programs are part of the teaching process in elementary school but typically, not in the upper grades. As students advance through school, they are required to learn from printed material that is increasingly complex and linguistically challenging (Alexander & Jetton, 2000; Zigmond, 2006). Students need to be able to understand and use the information provided by the text independently, because it is often the major source of knowledge within the classroom (Alfassi, 1997). Thus, the question becomes what does *teaching reading* look like for content area teachers? Actually, to effectively teach content, it would be impossible *not* to teach reading.

NRP's Five Components of Reading

In 2000, the report by the National Reading Panel (NRP) extended the current understandings about the skills students need to become independent readers. The panel conducted a meta-analysis on research literature on reading acquisition and reading instruction. From this work, the panel identified and defined five components critical to effective reading instruction: (a) phonemic awareness, (b) phonics, (c) fluency, (d) vocabulary, and (e) text comprehension.

According to the NRP (2000), phonemic awareness involves teaching students to identify and manipulate phonemes in spoken syllables and words, while phonics instruction stresses the acquisition of letter-sound correspondences. The focus is on teaching beginning readers to understand how letters are linked to sounds (phonemes) to form these letter-sound correspondences and spelling patterns and to apply this knowledge to their reading.

In the early years of elementary school, there is a strong emphasis on phonemic awareness and phonics, but as children begin to read, instruction is expanded to include fluency, vocabulary, and text comprehension. Often, fluency is neglected in the classroom, although it is a critical factor necessary for reading comprehension (NRP, 2000). If the student reads in a laborious and inefficient manner, comprehension of the text will be difficult to achieve. Lipson and Lang (1991) suggest that the relationship between fluency and comprehension is reciprocal. Allinder, Dunse, Brunker & Obermiller-Krolikowski (2001) describe this reading reciprocity. In order to comprehend text, a student must read fluently or at least at a relatively quick rate. However, as a student is better able to comprehend text, his or her reading may become more fluent. Further, when students encounter too many unfamiliar words, comprehension is negatively impacted (Rupley & Nichols, 2005). To manage the challenge of comprehending content area textbooks, students need a well-developed word knowledge base (Harmon, Hedrick, & Wood, 2005). Thus, in order for students to comprehend narrative and expository text, vocabulary instruction is crucial (Rupley, Logan, & Nichols, 1999).

Harris and Hodges (1995) defined comprehension as *intentional thinking during which meaning is constructed through interactions between text and reader* (p. 207). There is strong research evidence that students can be taught reading comprehension strategies and that this instruction can be effective at improving their understanding of content area texts (Duke & Pearson, 2002; National Institute of Child Health and Human Development [NICHD], 2000). Studies have shown that students who use learning strategies are more efficient learners (Blachowicz & Ogle, 2001) and experience more school success (Biemiller & Meichenbaum, 1992). In an extensive review of 20 years of research involving reading comprehension instruction for students with learning disabilities, Gersten, Fuchs, Williams, and Baker (2001) concluded that strategy instruction for both narrative and expository texts appear to have a consistent positive effect on comprehension performance for these students.

Mismatch of Content Area Textbooks

To complicate matters for the content area teachers, schools typically purchase multiple copies of the same science and social studies textbooks for every student in the class (Allington, 2002). Students are often assigned to read a chapter in a science or social studies textbook independently, complete a written assignment, and participate in a class discussion. Unfortunately, some students in the classroom may encounter a number of problems just trying to read the chapter. Research has shown that content area textbooks may be written two or more years above the average grade level of their students (Budiansky, 2001; Chall & Conrad, 1991), which can be especially problematic and challenging for students with disabilities (Mastropieri, Scruggs, Spencer, & Fontana, 2003). Not only do expository texts tend to be longer than narrative texts, but the content and formats are less familiar, and extensive prior knowledge is often assumed (Richek, Caldwell, Jennings, & Lerner, 2002).

In his 2002 article, Allington reported how exemplary teachers handled this thorny textbook issue. First, the teachers did not rely solely on the adopted textbook for their subject area. Instead, it was used in conjunction with other resources which were written at multiple levels. For example, content was taught from tradebooks, primary sources, and reliable websites. Second, these teachers provided students what was termed *managed choice* as they learned new content. For example, a unit of study was divided into sub-topics which students chose to study and reported back to the whole class. Finally, the exemplary teachers spent less time on whole-group lecture and tried to personalize the instruction to meet each student's learning needs.

Being aware of the issues with content area textbooks can assist classroom teachers in making instructional decisions on the most effective way to teach the content.
Varying the way students are grouped can help address different learning levels and skills when trying to learn new content. Working in cooperative learning groups or peer learning dyads provides support for students with different levels of skill development (Spencer, Scruggs, & Mastropieri, 2003). Allington and Johnston (2002) reported that giving students options on how to present their newly acquired knowledge allowed for students to match their learning styles and abilities with their chosen presentation format which enhanced their motivation.

Rethinking Teaching
Because the classroom is typically made up of students who exhibit a broad range of performance levels, it can be quite challenging for even the most experienced classroom teacher to successfully teach the content to all students. Research has revealed that when explicit, teacher-directed strategy instruction which includes direct explanation, modeling, and guided student practice is used students make significant gains in their reading comprehension (Manset-Williamson & Nelson, 2005). Likewise, by directly teaching and modeling specific strategies that effective learners use, students are more likely to apply these strategies, increase their comprehension, and become more independent, efficient learners (Alfassi, 2004; Frank, Grossi, & Standfield, 2006; Gersten et al., 2001).

Strategies for the Content area Classroom
So, what can content area teachers do to ensure that reading instruction continues throughout the course of a student's education?
First of all, strategies that visually demonstrate the information in the text have been found to be a highly effective instructional tool (Richek et al., 2002). With the challenges of the inflated reading levels so prevalent in content area textbooks, it is imperative that teachers use other means of instruction without relying solely on the written text. For example, students could develop a timeline or a graphic organizer to present the information in a social studies textbook (Boon, Burke, Fore, & Spencer, 2006) or draw out the steps to a science experiment.

Likewise, research on mnemonic devices concludes that they enhance learning and retention (Mastropieri & Scrugss, 1995; Mastropieri, Scruggs, & Graetz, 2005). Acronyms help to recall core concepts. For example, in life science, the characteristics of all living things are divided into four categories: organized structure, growth and development, reproduction, and response to environment. The acronym for this concept is OGRRs (*ogres*). The acroynym WAFLS represents all the requirements for living things: water, air, food (nutrients), living space, and shelter. Thus, the mnemonic phrase *ogres need their waffles in order to survive* summarizes the scientific terminology and the relationship of these concepts (Carnine & Carnine, 2004).

In addition, teachers need to have a repertoire of research-based strategies that focus on vocabulary development and reading comprehension. Thus, it is important to teach vocabulary as part of the curriculum and to select vocabulary words that are important to developing an understanding of the content and its related information and concepts (Misulis, 1999). Teach vocabulary as part of the curriculum and select words that are important to developing an understanding of the content and its related information and concepts (Misulis,1999). Moreover, research confirms the necessity to teach content vocabulary before students are required to read a text selection; thereby, eliminating barriers to comprehension (McKenna & Robinson, 2006) and to making connections to their existing fund of knowledge (Heilman, Blair, & Rupley, 2002). Most importantly, build on prior knowledge. Content learning becomes more relevant if it is connected to what the student already knows.

Vocabulary skills that can be used across curriculum areas include instruction on prefixes, suffixes, root words, and word families (Carnine & Carnine, 2004; Fisher, Frey, & Williams, 2002). For

example, one strategy is to construct charts with columns for suffixes, meanings, and examples of words. Therefore, in conjunction with preteaching vocabulary words, students can be taught the definition of high frequency suffixes such as *tion* (the act of), *ous* (having the quality of or possessing), *ment* (the act of or related to), etc. with examples of predic*tion* por*ous,* and develop*ment* (Carnine & Carnine). Likewise, knowledge of morphology can influence reading fluency. Research suggests that students be taught to (a) use their knowledge of root words and affixes as they read orally (Kame'enui & Simmons, 1990), (b) recognize and pause at internal and terminal punctuation (Rasinski, 1989), and (c) trace the print with fingers or tools to prevent omissions (Shanker & Ekwall, 1998).

Partner reading is another means to aid reading comprehension (Fuchs, & Fuchs, 2005; Mastropieri, Scruggs, Spencer, & Fontana 2003). Students read an important paragraph of the text selected by the teacher either silently or aloud to a partner. One partner is a *reteller* and the other is a *listener*. The reteller recalls the main idea of the paragraph to the listener. The teacher leads a class discussion and confirms the main idea. Next, the reteller reviews the paragraph to find two details that support the main idea. Then the reteller informs the listener about these details. Again, the teachers leads the group to confirm the important details. Likewise, Spencer, Scruggs, & Mastropieri (2003) found evidence in their study to support a similar comprehension strategy. This strategy involved having the students restate in their own words and in writing information from each paragraph that they read.

Research indicates that expository material is more difficult for students to comprehend than narrative material (Gregg & Sekerers, 2006; Harmon, Hedrick, Wood, & Gress, 2005). The various complicated text structures used in expository texts are more challenging than the story grammar used in narrative texts (Kucan & Beck, 1997). Research supports teaching students about different text structures such as compare-contrast, cause-and-effect, description, sequence or procedure, and enumeration. to increase their comprehension and retention of expository material (Gersten et al., 2001)

Fisher et al. (2002) reported several literacy strategies that were used in content area instruction throughout a chronically troubled high school in San Diego, CA, which resulted in increased student progress and achievement and college acceptances. These research-based, efficacy-proven strategies were adopted, modeled and practiced, and taught directly to the students by all the teachers. Teachers conducted read-alouds or shared readings for at least five minutes every day. Hearing teachers read or reading along while a teacher reads aloud is a highly effective way for students to hear fluent reading (Allen, 2000). The chosen selections typically were not from the textbook. Teachers used other materials that would increase students' background knowledge and introduce interesting vocabulary words.

In order to broaden student engagement and reflection of content material, a structured note-taking strategy was implemented. The Cornell note-taking system (Spires & Stone, 1989) was used. Students drew a single vertical line two inches from the left page margin. To the left of the line, students recorded their main ideas and key words. To the right of the line, students entered details. At the bottom of the page, students wrote a short lesson summary.

Also, reciprocal teaching was used to increase student engagement with the text. The students were divided into groups of four. They read a text selection together using a previously taught, demonstrated, and modeled procedure for predicting, questioning, clarifying, and summarizing (Palinscar & Brown, 1984). These small student discussion groups were designed to check for comprehension and strengthen understanding of the text. Fisher et al. (2002) noted that not only did these strategies have a positive effect on measures of student progress, but they encouraged learning for all students.
Last of all, in order for teachers to make effective instructional decisions they need to become aware of and help eliminate the problems with content area textbooks. Many teachers serve on textbook review committees, and teachers have a responsibility to not only question the content but also the reading levels of the textbooks. In addition, many publishing companies will agree to send a representative to the school and train the teachers to use the newly purchased textbooks and the accompanying supplements and materials for teachers and students. These supplements and materials frequently include a variety of activities, visuals, websites, and teaching suggestions that will address a wide range of academic levels within one classroom.

Concluding Thoughts
Because of the broad instructional range and diverse learning styles within content-area classrooms, teachers are concerned about how they can meet their students' different needs while covering the

required content material (Klinger, Vaughn, & Schumm, 1998). However, effective secondary content area teachers understand that reading comprehension is directly related to learning content information. They have embraced the role of teaching reading rather than fearing it. They find that reading instruction within the content areas to be essential, yet manageable. Because reading is not only vital for student progress, and it is a fundamental skill for employment (Calhoon, 2005), it becomes *indispensable for adequate functioning in society*. (Alfassi, 2004, p.171). Since *teaching reading* appears to be synonymous with teaching content effectively, thus, having a positive effect on statewide assessments and since the ability to read is an essential life skill for personal autonomy (Calhoun, 2005), as responsible educators, it is imperative that strategic reading instruction be included in the daily lessons in every classroom.

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